

REMARKS

Claims 1-20 remain pending in this application. Claims 15-20 have been withdrawn from consideration as being directed to a non-elected invention. Claims 1-3, 5-7 and 9 stand rejected under 35 USC §102(b) as being anticipated by Applicant's admitted prior art in figure 1, and claim 8 stands rejected under 35 USC §103(a) as being unpatentable over Applicant's admitted prior art in view of Margiott et al. Also, claims 1-3 and 6-9 stand provisionally rejected under non-statutory obviousness-type double patenting as being unpatentable over claims 1-17 of co-pending application No. 10/765,815.

In view of the preceding amendments and the following remarks, these rejections are traversed, and reconsideration of this application is respectfully requested.

Applicant is filing concurrently herewith a Petition under 37 CFR 1.144(a) to have the restriction requirement withdrawn. Therefore, Applicant has not cancelled claims 15-20.

Claims 10-14 have been allowed and claim 4 has been objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant acknowledges and appreciates the indication of allowable subject matter.

Applicant's claimed fuel cell system includes a surge detection device that generates a signal identifying the direction of airflow through the compressor. Applicant's intent when claiming the surge detection device in independent claim 1 was to include that it was capable of detecting and measuring airflow through the

device in both a forward and reverse direction, as set forth in paragraphs [0015] and [0016] of the Specification. In order to more clearly identify this feature of Applicant's invention, independent claim 1 has been amended above to specifically state that the surge detection device measures the airflow through the device in both a forward and reverse direction so as to identify the direction of the airflow through the compressor.

Applicant's admitted prior art of figure 1, discussed in paragraphs [0006] - [0009] of the Specification, includes a mass flow meter 22 that measures the airflow through the compressor 16. The same mass flow meter is disclosed and claimed in U.S. Patent Application Serial No. 10/765,815. The mass flow meter 22 is not a surge detection device because it is not capable of measuring airflow in a reverse direction through the mass flow meter, and thus through the compressor. The mass flow meter 22 is only capable of measuring flow in a single direction, i.e., the forward direction, and is used to provide a signal to the controller that sets the desired cathode airflow to the fuel cell module 14. If the compressor were to be subjected to a compressor surge, where the airflow is in an opposite direction, the mass flow meter 22 would not be able to provide a signal indicative of this condition.

Applicant respectfully submits that independent claim 1 as now more particularly defined includes a surge detection device that measures gas flow in both a forward and reverse direction. Applicant's admitted prior art and U.S. Patent Application Serial No. 10/765,815 do not teach or suggest a mass flow meter capable of this, and thus do not teach or suggest a device as claimed. It is therefore respectfully requested that the §102(b) and the double patenting rejection be withdrawn.

U.S. Patent No. 6,984,464 issued to Margiott et al. discloses a hydrogen passivation shutdown system for a fuel cell power plant 10. Applicant submits that the valve 72 is a cathode recycle valve that selectively allows the cathode exhaust to return to the cathode input, and is not a bypass valve that is controlled in response to a compressor surge. Applicant further submits that Margiott et al. does not teach or suggest preventing a compressor surge in a fuel cell system, and does not teach or suggest a surge detection device of the type discussed above. Therefore, Applicant submits that Margiott et al. cannot provide the teaching missing from Applicant's admitted prior art to make Applicant's claimed invention obvious. It is therefore respectfully requested that the §103 rejection be withdrawn.

It is now believed that this application is in condition for allowance. If the Examiner believes that personal contact with Applicant's representative would expedite prosecution of this application, he is invited to call the undersigned at his convenience.

Applicant is filing concurrently with this Response, a Power of Attorney to Prosecute Applications before the USPTO (appointing practitioners associated with the Customer No. 65798 Power of Attorney and changing the Correspondence Address as identified below) along with a Statement under 37 CFR 3.73(b).

Respectfully submitted,

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